ABSTRACT

A hybrid stent is formed which exhibits both high flexibility and high radial strength. The expandable hybrid stent for implantation in a body lumen, such as a coronary artery, consists of radially expandable cylindrical rings generally aligned on a common longitudinal axis and interconnected by one or more links. In one embodiment, a dip-coated covered stent is formed by encapsulating cylindrical rings within a polymer material. In other embodiments, at least some of the rings and links are formed of a polymer material which provides longitudinal and flexural flexibility to the stent. These polymer rings and links are alternated with metallic rings and links in various configurations to attain sufficient column strength along with the requisite flexibility in holding open the target site within the body lumen. Alternatively, a laminated, linkless hybrid stent is formed by encapsulating cylindrical rings within a polymer tube.